

**FORMATION OF SPATIAL MOSAIC OF *ABIES NEPHROLEPIS* (PINACEAE) POPULATIONS IN KOREAN PINE-BROADLEAVED FORESTS IN THE SOUTH OF RUSSIAN FAR EAST**

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SUMMARY

We studied structure and described formation of *Abies nephrolepis* (Trautv.) Maxim. population mosaic in Korean pine-broadleaved forest of the Sikhote-Alin mountain range in the south of Russian Far East. The study was performed on two permanent sample plots (1.5 ha and 10.5 ha) established in primary forest of Verhneussuriysky Research Station of the Federal Scientific center of the East Asia terrestrial biodiversity, FEB RAS. One of the permanent sample plots (10.5 ha) was specifically designed for studying tree population mosaic. It covers an area necessary for the analysis of population structure of the dominant tree species. To describe the population mosaics we use demographic approach that allows to consider specific features of plant ontogeny. It is established, that mosaic structure transforms from contagious (immature plants) to normal (generative plants) distribution. Mosaic of generative plants is formed at the time of transition from immature to virginal ontogenetic stage. Unlike mosaic of *Picea ajanensis* (Siebold et Zucc.) Carr., where plants continuously accumulated starting from virginal stage, mosaic of *A. nephrolepis* continues to thin out starting from immature stage. Thus, this species is characterized by R-strategy. Contagious distribution at different ontogenetic stages is associated with environmental heterogeneity and is due to the history of local stand disturbances: a spatial and temporal process of canopy gaps formation.

**Key words:** *Abies nephrolepis*, spatial structure, population mosaic, Korean pine-broadleaved forest, the Russian Far East.